

CLAIMS

What is claimed is:

1. A spacecraft radiator system for use on a spacecraft having a body and one or more solar arrays, the system comprising:

first and second opposite facing payload radiators;

one or more deployable radiators that radiate heat from both sides thereof; and

5 heat pipes that thermally couple the payload radiators to selected ones of the deployable radiators.

2. A spacecraft comprising:

a body;

one or more solar arrays;

a spacecraft radiator system comprising:

5 first and second opposite facing payload radiators;

one or more deployable radiators that radiate heat from both sides thereof; and

heat pipes that thermally couple the payload radiators to selected ones of the

deployable radiators.

3. A spacecraft heat dissipation method comprising the steps of:

configuring a spacecraft to have a body, one or more solar arrays, first and second opposite facing payload radiators, one or more deployable radiators that radiate heat from both sides thereof, and heat pipes that thermally couple the payload radiators to selected ones of the deployable radiators;

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launching the spacecraft into orbit; and

when in orbit, transferring heat coupled to the opposite facing fixed payload radiators to the deployable radiators for radiation into space from both sides to the deployable radiators.